

Indicator 6: Hospitalizations for Work-Related Burns

Significanceⁱ

Describing and tracking hospitalizations from work-related burns are useful for identifying high-risk occupations and targeting prevention.

Methods

The Colorado Hospital Discharge Dataset is compiled by the Colorado Hospital Association (CHA) and, through a data sharing agreement, made available to the Colorado Department of Public Health and Environment (CDPHE). The hospital discharge dataset contains records of all hospital discharges from member hospitals. In Colorado, nearly 100% of hospitals are CHA members (excluding Federal facilities). Each record in the dataset represents one hospital discharge resulting from an inpatient hospital admission.

Data were collected from all Colorado discharge data records for cases with an ICD-9-CM principle diagnosis code between 940 and 949. Work-related hospitalizations were identified by selecting records where workers' compensation insurance is the expected payer. Only Colorado residents age 16 and over were included for analysis. Rates were calculated using employment data from the Bureau of Labor Statistics.

ⁱ Council of State and Territorial Epidemiologists. *Occupational Health Indicators: A Guide for Tracking Occupational Health Conditions and Their Determinants*. Last updated April 2012.

Results

Table 6.1: Number and crude rate of work-related burn hospitalizations per 100,000 employed, Primary payer workers' compensation, Age 16 and older, Colorado, 2001-2011*

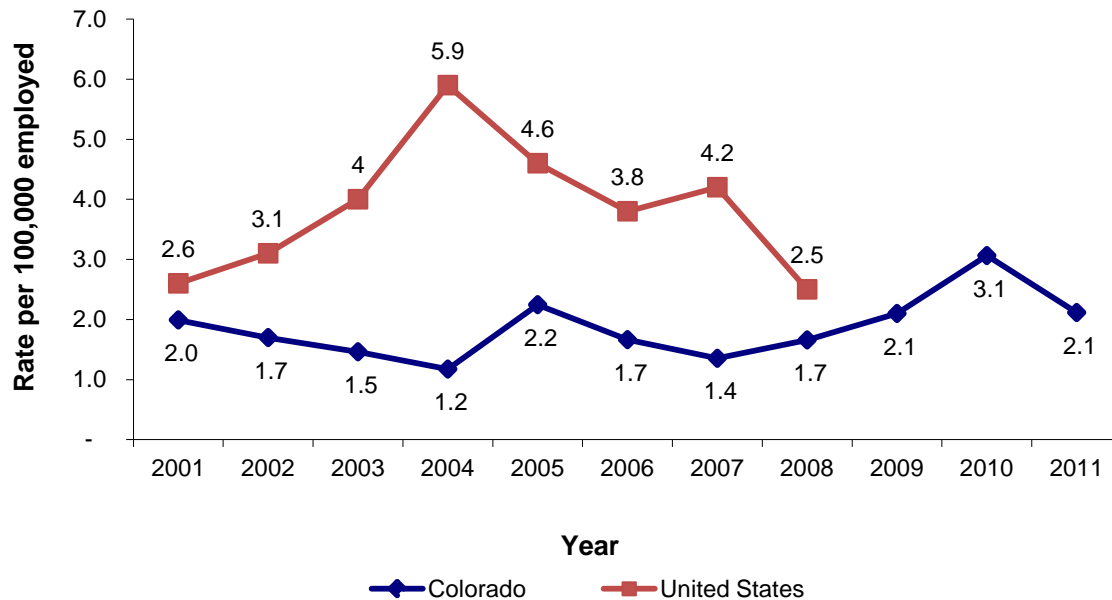
Year	Annual number of burn hospitalizations	Crude rate of burn hospitalizations per 100,000 employed
2001	44	2.0
2002	39	1.7
2003	34	1.5
2004	28	1.2
2005	54	2.2
2006	42	1.7
2007	35	1.4
2008	43	1.7
2009	53	2.1
2010	76	3.1
2011	53	2.1
Average	46	1.9

Numerator: Colorado Hospital Association hospital discharge data analyzed by the Health Statistics Section, Colorado Department of Public Health and Environment

Denominator: Bureau of Labor Statistics (BLS), Geographic Profile of Employment and Unemployment (GP) and Current Population Survey (CPS)

**2011 rate calculations are preliminary*

Figure 6.1 Annual crude rate of work-related burn hospitalizations per 100,000 employed persons, Age 16 years and older, Colorado and the United States, 2001-2011*



Numerator: Colorado Hospital Association hospital discharge data analyzed by the Health Statistics Section, Colorado Department of Public Health and Environment

Denominator: Bureau of Labor Statistics (BLS), Geographic Profile of Employment and Unemployment (GP) and Current Population Survey (CPS)

United States Data: National Hospital Discharge Survey, Provided by the Council of State and Territorial Epidemiologist (CSTE) Occupational Health Indicators Reports

**United States data beyond 2008 not yet available through CSTE, 2011 rate calculations are preliminary*

Limitations

- Most work-related burn injuries are likely treated in the out-patient setting and, thus, not captured in hospitalization data.
- The true burden of work-related hospitalizations may be under-represented if workers utilize other payer sources (e.g., self-pay, private insurance). Employed individuals less than 16 years old experience work-related burn injuries but, because the GP/CPS excludes workers younger than 16 years of age, corresponding employment denominator data are not readily available.
- Colorado residents hospitalized in another state are not captured in these data. Hospitalization discharge records are based on admissions, not persons; thus, they may include multiple admissions for a single individual or single person-injury event.
- Work-related hospitalization data analyzed using the methods in this report are not directly comparable between states due to differences in states' workers' compensation insurance programs.

- Though United States level data are provided in this report, comparing state data to United States data should be done with caution as United States data are based on national probability estimates from state-level data, and workers' compensation insurance programs vary from state to state.

Recommendations and Next Steps

- Analyze existing hospitalization data available to the CDPHE to describe work-related burn hospitalizations in Colorado by age, gender, race/ethnicity and type of injury.ⁱⁱ
- Continue to explore opportunities to link hospitalization data with other health and employment data to obtain information on industries and occupations associated with serious burns. (See Indicator # 2 Recommendations for more information about analyzing hospitalization data.)
- By conducting more detailed analyses described, identify the worker characteristics or risk factors that most contribute to work-related burns to guide intervention, education and prevention efforts.
- Better define other issues that may affect hospitalization data patterns, such as whether there is an overall increase or decrease in non-work-related hospitalizations in Colorado.

ⁱⁱ The Occupational Health and Safety Surveillance Program is currently working to publish an expanded evaluation of work-related hospitalization data.